DESINING CONDITIONS FOR A BETTER BUILDING MANAGEMENT

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All professionals related to the building sector are conscious that buildings need to be maintained. Otherwise, the costs of repairs after years of doing nothing will be much higher than even demolishing and reconstruct again. But, what must be considered? Which considerations must be taken? When you, as an architect, start a new project, you think about shapes, volumes, lighting, colours and surroundings. However, something very important is forgotten: the life afterwards, and how to take care of the building you have just drawn [1].

There are three main facts for the deterioration of buildings:

1. Normal use, of course there is always the matter of vandalism but this is something you cannot control.
2. Construction defects, which can appear right after the finish or within the first ten years, due to the settlement of foundations and main structure of the building [2].
3. Deficiencies in the design.

This third fact is where we are going deeper, as most of the time, these deficiencies are due to the unfamiliarity of the professionals in charge of the design, with the maintenance of the building afterwards (Figure 1).

Fig. 1: Maintenance with or without extraordinary investments. Own elaboration.
How to choose the right materials and how to install them, if something can be easily cleaned or easily removed to be replaced when some works have to be done, if you can reach all services of the building, or designing raisers wide enough to collect the current services plus the ones you might need in the future. All these considerations may change the operational costs of a building so as the costs of premature refurbishments because of a loss in useful life (Figure 2).

![Diagram](Buildings Value vs Useful Life)

**Fig. 2: Lifetime with or without basic maintenance. Own elaboration.**

Common sense and life has proved that considering all this may have happier users, better appearance of finishes, less costs and longer life period of the buildings.

**REFERENCES**
